

**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER AND WASTE MANAGEMENT  
601 57th STREET SE  
CHARLESTON, WV 25304-2345  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WATER POLLUTION CONTROL PERMIT**

**FACT SHEET, RATIONALE AND INFORMATION FOR  
GENERAL NPDES PERMIT FOR CONSTRUCTION STORMWATER**

This fact sheet explains the new Construction Stormwater General Permit WV0115924, issued on XX-XX-XXXX.

**1. NAME AND ADDRESS OF APPLICANT**

An applicant is any establishment with discharges composed entirely of stormwater associated with industrial activity (construction) agreeing to be regulated under the terms of this General Permit (except as noted herein). Construction activities are defined as land disturbing operations such as clearing, grubbing, grading and excavating operations during site development for residential, commercial or industrial purposes except for operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale. A common plan of development is a contiguous construction project where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan, including most subdivisions.

**2. GENERAL WV/NPDES PERMIT NO: WV0115924**

**3. COUNTY:** Any WV county                      **RECEIVING STREAM:** Any WV stream

**4. PUBLIC COMMENT PERIOD FROM XX-XX-XXXX TO XX-XX-XXXX**

**5. SIC CODE: 17**

**6. DESCRIPTION OF APPLICANT'S FACILITY OR ACTIVITY:** The activities and facilities will be varied.

**Commented [A1]:** Need to ensure they meet all FS requirements in the federal regs @ 40 CFR 124.8 and 124.56. A lot of this language sounds like permit language, as opposed to "why" – explaining why the permit contains what it does, which is the primary purpose of the Fact Sheet.

**Commented [A2]:** This is the description of the Activity. This heading does not accurately depict what is in the paragraph below it. Recommend revising it.

**Commented [A3]:** Replaced by above section?

## **7. DESCRIPTION OF DISCHARGES**

Earthmoving and grading projects create conditions where accelerated erosion can cause large quantities of soil to be deposited into the streams and rivers of the state. The lack of vegetation, steepening of slopes, increased runoff, decreased infiltration, and other ill effects of construction can cause a 1,000-fold increase in the rate of erosion over pre-existing conditions. The erosion rates on construction sites can run into the hundreds of tons per acre. By volume, sediment is the number one pollutant in the state's waters and degrades more miles of stream than any other pollutant.

## **8. BACKGROUND**

The 1972 Amendments to the federal Water Pollution Control Act (referred to as the Clean Water Act or CWA), prohibit the discharge of any pollutant to navigable waters from a point source to a water of the United States unless the discharge is authorized by an NPDES permit. Efforts to improve water quality under the NPDES program traditionally and primarily focused on reducing pollutants in discharges of industrial process wastewater and municipal sewage.

However, as pollution control measures were initially developed for these discharges, it became evident that more diffuse sources (occurring over a wide area) of water pollution, such as agricultural and urban runoff, are also major causes of water quality problems. Some so-called diffuse sources of water pollution, such as agricultural stormwater discharges and irrigation return flows, are statutorily exempted from the NPDES program.

Since the enactment of the 1972 amendments to the CWA, considering the rise of economic activity and population, significant progress in controlling water pollution has been made, particularly with regard to industrial process wastewater and municipal sewage.

The "National Water Quality Inventory" 1988 report to Congress provided a general assessment of water quality that concluded pollution from diffuse sources is a serious problem. Runoff from agricultural, urban areas, construction sites, land disposal, and resource extraction is cited by the states as the leading causes of water quality impairment.

The states conducted a more comprehensive study of diffuse pollution sources under the sponsorship of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) and the EPA, which indicated that urban runoff is a major cause of beneficial use impairment.

This trend has continued almost unabated. Recent studies (Metropolitan Council of Governments, EPA, states, and others) have shown that urban runoff from all sources severely impacts water quality and limits designated uses of the waters of the United States. Studies by the Watershed Assessment Section of the DEP have determined that sediment is the number one source of water quality impairment in West Virginia. Sediment moderately to heavily impacts approximately 70% of the state's waterways. One of the largest sources of sediment is construction activities.

The Water Quality Act (WQA) of 1987 contained provisions that specifically addressed stormwater discharges. Section (p) was added to the stormwater discharge provision Section 402. Section 402(p)(4)(A) required the EPA to promulgate final regulations governing stormwater permit application requirements for stormwater discharges associated with industrial activity and discharges from large municipal separate stormwater systems. In response to lawsuits filed by the Natural Resource Defense Council (NRDC), the EPA finally published regulations on November 16, 1990. West Virginia's first construction stormwater general permit was based on this rule. In early 1992, the EPA published additional information that changed some of the standards, particularly in relation to construction. The state's previous construction stormwater general permits closely mirrored the EPA's permit except the federal permit's higher minimum disturbance threshold was lowered to three acres.

The NRDC again sued the EPA on several issues, one germane to this permit. NRDC contended, among other items, that the five-acre limit for construction site disturbance was arbitrary and capricious and should be rethought. The court agreed, telling the EPA to come up with a new and lower disturbance threshold. In 1999, the EPA published the new rule for Phase II of the Stormwater Rule General Permit in the Federal Register, and which, among other things, lowered the disturbance threshold for construction sites that require NPDES permit coverage from five acres to one acre, meeting the intent of the court ruling on NRDC's lawsuit.

In 2009, EPA published a new Construction and Development Effluent Limitations Guidelines rule (C&D rule) (40 CFR Part 450) which established numeric and non-numeric effluent limitations for storm water construction discharges. The numeric effluent limitations have been stayed for further study (November 5, 2010) however the non-numeric effluent limitations are in effect and are reflected in revisions for this General Permit.

In 2012, ~~the~~ West Virginia's General Permit for Construction Stormwater was reissued. In 2019, the permit went through a major reorganization to make searching easier: a table of contents and appendices were added, and application requirements were listed to resemble checklists.

The 2019 permit went into effect on February 9, 2019; however, ~~due to it was~~ appealed, the Department ~~developed a Settlement Agreement~~ and presented the ~~settlement~~ agreement to the Environmental Quality Board for issuance as an Order. The Order directed the Department to modify the 2019 permit and place the draft modification on Public Notice. Many comments were received. ~~However,~~ the most significant came from the EPA in the form of a specific objections which put the modified draft permit into a state of flux, due to federal regulatory prohibition for a state to issue a permit to which the EPA has objected.

WVDEP ~~has agreed to~~ now preparing to issue a new 2020 Construction Storm-Water General Permit.

**Commented [A4]:** These things are not included in this new draft. Ease in searching the permit, accurate section headings, a TOC and appendices had no bearing on the appeal of the 2019 permit and may still be relevant for ease of reference. If the permit does not reflect the format of the 2019 permit then additional explanation may need to be included to round out this text.

## 9. GENERAL

The DEP, through its NPDES permitting system program, is responsible for ensuring that discharges to surface waters are identified, receive adequate treatment and are disposed of in accordance with federal and state regulations. Usually this requires an individual permit based on a thorough review of the facility processes and the constituents of its waste stream. The issuance of an individual permit for any facility is a resource intensive and time-consuming process for both the permitting agency and the industry.

The Fact Sheet for the 2012 Construction Stormwater General Permit reported an average of 500 construction projects reviewed over the preceding 20-year period. DEP records show, on average, more than 1000 construction projects each year from 2015 through 2019. All parties recognize the immensity of the problem of issuing individual permits for the large number of anticipated new sites throughout the state; hence, such permitting is currently too resource intensive.

For these reasons, the DEP has decided to utilize a general WV/NPDES permit. The DEP assumed primacy for the NPDES Program from the EPA in 1982. Under 47CSR10-13.6 of the Legislative Rules, a general permit can be used to regulate either separate storm sewers or a category of point sources other than separate storm sewers if the sources all:

- a. Involve the same or substantially similar types of operations;
- b. Discharge the same types of wastes; Require the same effluent limitations or operating conditions;
- c. Require the same or similar monitoring; and
- d. In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

**Commented [A5]:** Looks like there are two items here; may need a hard return before “require”.

The general permit process has proven to be a very efficient mechanism to cover construction-related activities. It is proposed to continue the use of a general permit for these facilities.

## 10. SUMMARY OF SIGNIFICANT CHANGES TO THE GENERAL PERMIT

The 2020 draft general permit includes a number of new or modified requirements, due to the EQB Settlement Order and the EPA Objection described above. The following list summarizes the significant changes to the 2012 General Permit, due to the fact that the currently effective 2019 permit is not the revised document:

**Commented [A6]:** The 2/2019 GP is currently in effect and is the current permit. This should be revised to reflect the current history and the 2/2019 permit should not be completely ignored..

**A. Acknowledgement of WV Water Pollution Control Permit Number WV0115924** which is as state-specific permit and not under the oversight of the EPA. This permit addresses land disturbance activities associated with Construction Activities.

**Commented [A7]:** This is not a true statement. EPA maintains oversight over all permits that implement federal requirements. EPA does not have oversight over the WV O&G permit (since that is a state permit and does not implement federal req'ts), but the permit # listed here is the GP for construction. Recommend removing this section entirely.

**B. Compliance with Anti-degradation Protections, Compliance with 303d-Listed Streams, and Total Maximum Daily Loads (TMDLs)** – this General Permit mirrors the EPA's approach to protecting water quality. Appropriate BMPs must be used on sites draining to state waters that meet anti-degradation requirements and also for compliance with 303d listed waters and those with approved sediment-related TMDLs.

**Commented [A8]:** There is also separate stabilization requirements and increased inspection frequency in the EPA CGP for discharges to impaired/TMDL waters. (See Part 3.2 of the EPA CGP)

**C. Removal of the Permitting Exemption for Construction Site Runoff for Single Family Homes with Land Disturbance of 1 to less than 3 Acres** – There is no federal exemption for sites of this category, therefore the General Permit now reflects the federal requirements. All sites greater than one acre must obtain NPDES permit coverage.

**D. Inclusion of prohibitions required by the federal C&D Rule** – The General Permit was revised to include all of the federal prohibitions in accordance with 40 CFR §450.21.

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**E. Submittal of Groundwater Protection Plans (GPPs)** – Due to increased development through land disturbance in karst areas, GPPs are now subject to submittal and review during the application process as a means of protecting drinking water sources.

**Commented [A9]:** This is not specified in the permit. Please check to ensure consistency between documents.

**F. Qualifications of the Person Preparing the Stormwater Pollution Prevention Plan (SWPPP) and Conducting Construction Site Inspections** – EPA concluded that a person knowledgeable in the principles and practices of engineering be responsible for preparation of the SWPPP, inspection of E & S Controls, inspection of BMPs as they are installed, and inspections after rain events. These inspections help to ensure that controls are protecting waters of the state.

**G. Inclusion of Items Subject to Inspection and Inspection Frequency** – EPA found that the 2012 permit did not include the required items subject to the SWPPP, inspections, and inspection frequency. These were finding of EPA's Permit Quality Review and were previously addressed in the 2019 General Permit.

**H. Notice of Termination-** Due to the heavy workload on the inspection staff, the 2019 General Permit presented a mechanism for the timely closing of permit coverage for stabilized sites. Permittees could utilize the services of professional engineers and professional surveyors by obtaining from them certifications that all disturbed lands

met final stabilization criteria. This 2020 draft permit also includes this option due to the unlikelihood that DEP could add to its field staff.

**I. Digital Mapping** – Technology has evolved since the issue of the dated the 2012 General Permit and the public expects the DEP will ~~to~~ meet its own technology requirements. Previously, a single point's latitude and longitude was all that DEP required, regardless of the project's size. Many projects span watersheds. Some projects span county or municipal boundary lines. Many projects are subject to Larger Common Plan of Development or Sale permitting requirements. Furthermore, the WV Legislature determined that a public body may not charge a search or retrieval fee or otherwise seek reimbursement based on a man-hour basis as part of costs associated with making reproduction of records (Freedom of Information – WV Code Chapter 29B). For these reasons, the draft 2020 permit requires GIS shapefiles or AutoCAD drawings ~~off~~ for proposed projects.

**J. Liability** – The state hasn't kept up with changes in federal rules. The Liability Section of the draft 2020 permit was modified to address the discrepancies.

## 11. COVERAGE UNDER THE GENERAL PERMIT

The general permit proposes to provide coverage for any discharges composed entirely of stormwater associated with industrial (construction) activity and agreeing to be regulated under the terms of the general permit except for:

- A. Operations that result in the disturbance of less than one acre of total land area, which is not part of a larger common plan of development or sale.
- B. Stormwater discharges associated with land disturbing activities that may reasonably be expected to be causing or contributing to a violation of a water quality standard as determined by the Director.
- C. Land disturbing activities governed by other NPDES permits issued by the Department of Environmental Protection. This includes Division of Mining and Reclamation permits for coal mining and non-metallic quarries.
- D. Landfills, except in the preparation of a new landfill, landfill treatment facilities and/or borrow areas.
- E. Other activities exempt from NPDES permitting requirements as set forth in 40CFR122.3 and 47CSR10.3.2.b.

**Commented [A10]:** DEP still has to accept the NOT and somehow acknowledge that the permit has been terminated. How does the permittee know whether the permit is terminated?

**Commented [A11]:** This sentence is confusing. Recommend revising. Can't really understand what it is trying to say and/or what requirements DEP was not following that the public now expects will be met? Does the edit provide the clarity that DEQ is seeking to communicate.

**Commented [A12]:** Is there another permit or section in this permit that can be cross referenced here so that permittees know the requirements for these types of sites?

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**Commented [A13]:** Added here because the language is in the draft permit.

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- F. Land disturbing activities related to oil and gas activities as required by the Energy Policy Act of 2005. These activities include construction of drilling sites, waste management pits, and access roads, as well as construction of the transportation and treatment infrastructure, such as pipelines, natural gas treatment plants, natural gas pipeline compressor stations, and crude oil pumping stations. Construction activities that result in a discharge of a reportable quantity release or that contribute pollutants (other than non-contaminated sediments) to a violation of a water quality standard are still subject to permit coverage under WV0115924 or an individual NPDES permit.

Determination of the disturbed area is made by totaling all disturbed area directly related to construction of the entire project. Offsite waste (excluding sales of topsoil to individuals) and borrow sites are included in the total disturbance unless borrow sites are commercial quarries and regulated by the Division of Mining and Reclamation.

For subdivisions, the total disturbed area is calculated by adding up all disturbances related to the installation of utilities, construction of sediment control facilities, building of roads and other infrastructure. Phased projects that disturb less than one acre in each phase but will eventually disturb more than one acre with all phases will need to register under this permit.

Construction of single-family residences by the homeowner or homeowner's contractor requiring land disturbances of one to less than three acres in size are provided coverage under the General WV/NPDES Water Pollution Control Permit now require applications for registration. The NPDES General Permit regulations at 40 CFR 122.28(b)(2) require that a Notice of Intent (NOI) be submitted to obtain coverage under a general permit for which the discharge is eligible.

The DEP's Best Management Practices Manual contains a generic Storm Water Pollution Plan for single family home construction that may be used as a SWPPP. The plan can be found in Chapter 6 of the manual at the following link:  
[https://dep.wv.gov/WWE/Programs/stormwater/csw/Pages/ESC\\_BMP.aspx](https://dep.wv.gov/WWE/Programs/stormwater/csw/Pages/ESC_BMP.aspx)

For minor construction activities (one to less than three acres not including land disturbance related to single family homes that will be completed within one year) submittal of a Notice of Intent (NOI) is required prior to commencing construction. A Stormwater Pollution Prevention Plan (SWPPP), Groundwater Protection Plan, and digital map must be submitted for review by DEP personnel. A project that disturbs one to less than three acres but will have construction activities one year or longer must file a Site Registration Application Form and be public noticed.

**Commented [A14]:** I don't see this term used anywhere in the draft permit. It is listed in the Definitions section only. Please review the FS and permit to ensure consistency between the two documents.

#### **Previously Approved Projects**

Permittees with sites approved, XX-XX-XXXX thru XX-XX-XXXX which met the requirements of General WV/NPDES Water Pollution Control Permit WV0115924, effective February 9, 2019 may retain coverage under this General Permit, effective XX-XX-XXXX, by

submitting a certification agreeing to abide by the terms and conditions of this General Permit. Sites approved prior to XX-XX-XXXX shall have until XX-XX-XXXX to have final stabilization completed.

Permittees with sites approved from XX-XX-XXXX TO XX-XX-XXXX, and who submitted certification of agreement to abide by the terms and conditions of the 2019 General Permit, may retain coverage by submitting a certification of agreement to abide by the terms and conditions of the 2020 General Permit.

Certification documents as described in the preceding paragraphs are due no later than XX-XX-XXXX.

Permittees with sites that are not stabilized by XX-XX-XXXX, and not eligible for submittal of the Certification described in the preceding paragraphs, must submit a complete application to continue permit on or before XX-XX-XXXX.

Permittees must comply with the Public Notice requirements found in G.4.b.5. of this General Permit.

## MONITORING REQUIREMENTS

Monitoring is not required unless requested by the Director. Construction activities are usually of short duration, less than one year, and the pollutant associated with construction is primarily sediment. The measures used to minimize pollution for land disturbing activities are preventative i.e., best management practices (BMPs) and are not subject to effluent limits.

### WHEN TO APPLY

The application for construction activities requiring coverage must be submitted at least 60 days prior to starting the project, except as follows. Projects that discharge to Tier 3 waters, or with 100 or greater acres of disturbance, or with a grading construction phase of one year or greater, must be submitted at least 100 days prior to start of construction in order to allow time for the public notice procedure.

Minor construction projects (one to less than three acres) not discharging upstream of Tier 3 waters must submit the NOI 15 days prior to initiation of construction. Minor construction projects discharging upstream of Tier 3 waters must submit the NOI and SWPPP at least 60 days prior to start of construction.

A project that disturbs one to less than three acres but will have construction activities one year or longer must file a Site Registration Application Form and be public noticed.

**Commented [A15]:** Recommending using this title as a heading in the permit. These requirements are contained in the SWPPP section of the permit. Also, recommend comparing the permit and fact sheet to be sure that all types of projects are listed in both documents.



The General Permit also provides for earth-disturbances that occur in response to a public emergency (e.g., a natural disaster, widespread disruption in essential public services). If earth-disturbances require immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services, permit coverage for discharges associated with such earth-disturbances are authorized on the condition that a complete and accurate NOI or Site Registration Application is submitted within 30 calendar days after commencing earth-disturbing activities.

The applicant must provide documentation in their SWPPP to substantiate the occurrence of the public emergency. DEP recognizes that obtaining General Permit coverage following the normal procedures is not feasible in situations requiring emergency-related construction. By providing the operators of these projects with the ability to immediately begin work, and to postpone the applications, DEP intends that these projects may proceed without delay. Once the initial 30 calendar days has expired, however, it is the requirement of this permit that applications be submitted for permit coverage.

## 12. SECTION-BY-SECTION RATIONALE

### Section A. Terms of Permit

This section of the permit establishes discharge limitations. Since construction activities are normally short term, sampling is not required unless requested by the Director.

**Commented [A16]:** I don't understand how this sentence relates to Section A of the draft permit. The purpose of the fact sheet in this instance would be to explain the basis for effluent discharge limitations; that should be explained here.

### Section B. Schedule of Compliance

Compliance with this General Permit and the approved Stormwater Pollution Prevention Plan (including the sequence of events) and Groundwater Protection Plan is required upon the beginning of the construction project.

**Commented [A17]:** What about those projects that are NOT short term? The permit differentiates between public notice requirements for projects that will take longer than 1 year.

### Section C. Management Conditions

This section is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules as well as standard conditions for all NPDES permits at 40 CFR §122.41. These rules establish that every NPDES permit contains certain standard conditions. A reference to Title 47, Series 11, Section 9 of the West Virginia Legislative Rules was included that requires that outlet markers be posted. Outlet markers would be required only during the time of active permit coverage.

### Section D. Operation and Maintenance

This section is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules.

#### Section E. Monitoring and Reporting and Definitions

Unless directed by the Director of the DEP, monitoring ~~will~~ is not be required by this permit. Reports ~~will~~ shall be maintained in accordance with and as required in Section G.4.e.2.C.v. In addition, new definitions are included which relate to the stormwater permitting program.

**Commented [A18]:** See draft permit mark up for EPA comments on the Definitions section of the draft permit.

**Commented [A19]:** Recommend including all terms that were added.

#### Section F. Other Reporting

This section is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules.

#### Section G. Effluent Limitation and Other Requirements

This section encompasses the requirements specific to the stormwater permitting program and those sites subject to regulation under the general permit.

- G.1 This paragraph depicts the situations for which the Director may require a facility covered by the permit to be covered by a different permit or when such facility may approach the Director on its own initiative to obtain coverage by a different permit.
- G.2. Prohibition of non-stormwater discharges. Minor revisions are included to reflect requirements of the C&D rule. The purpose of G.2 is to provide permittees with a comprehensive list of the types of discharges that are authorized once covered under this permit. This list makes permittees aware of allowed stormwater discharges, and of any additional requirements associated with those discharges to minimize the discharge of pollutants, and also makes permittees aware that any discharges not included on the list are prohibited from coverage under this General Permit. The General Permit notes that "uncontaminated" means that the discharge meets water quality standards. Similarly, "non-turbid" means the discharge meets turbidity-related water quality standards.
- G.3. This paragraph details that stormwater discharges from a project cannot contain hazardous substances.
- G.4. This section details the requirements of the SWPPPs that must be developed for each facility covered by the general permit.

**Commented [A20]:** This is not stated in the draft permit. Recommend including these terms in the Definitions section of the permit document.

**Commented [A21]:** There is no section in the draft permit to outline GPP requirements. Please add language here to explain why or add a section for GPPs to both the permit and fact sheet.

This general permit establishes minimum standards of practices (best management practices) for specific situations rather than specific effluent limitations for stormwater

discharges. This means the quality of the discharges must meet a best management practice requirement that represents the minimum level of controls. This permit allows the meeting of water quality standards with the proper installation of the minimum standards set forth in the permit and instructions. The application and plans detailing the permittee's schedules and intended best management practices must be submitted for approval in the time frames detailed in Section 12 of this Fact Sheet titled 'When to Apply'. Compliance with the plans detailing the permittee's schedule and intended best management practices must begin immediately as detailed in the SWPPP.

**Commented [A22]:** This information has to be in the permit itself, not only the fact sheet.

The development and implementation of the SWPPP is one of the most important parts of this permit and is critical to the successful control of stormwater pollution. The SWPPP must be modified as necessary to include additional or modified BMPs designed to correct specific problems identified during inspections. These adaptive management requirements are designed to result in permit compliance and prevent stormwater discharges that could cause a violation of state water quality standards. The SWPPP must also be modified whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.

All NPDES permittees are required to develop a Groundwater Protection Plan (GPP). For construction sites, the areas of concern will be equipment maintenance yards, including fueling and refueling areas, and product storage facilities. GPPs should address groundwater protection and maintenance.

G.4.a. This section contains signatory requirements of the SWPPP and GPP as well as the condition that a Qualified Person must prepare the SWPPP.

**Commented [A23]:** Is there a similar req't for a Qualified Person to prepare the GPP?

G.4.b. This section details the timeframe an application must be submitted. This section also includes the requirements for the public notice sign.

**Commented [A24]:** As stated prior, this should be a stand alone section of the permit, not buried in the SWPPP req'ts section.

G.4.c. This section details when the SWPPP must be modified.

G.4.d. This section details general management conditions including preventive maintenance, good housekeeping and spill prevention and response. Probably the most common reason for failure of construction site erosion control devices (BMPs) is inadequate maintenance. If BMPs are properly constructed, but not properly or frequently maintained, very little benefit may be expected. Newly installed devices will perform as initially expected until their capacity is exceeded. Silt fences, for example, should be maintained before the material that accumulates behind them becomes excessive. More importantly, the integrity of the fences needs to be checked frequently. Many silt fences at construction sites are undermined or bypassed because of large flows or large sediment accumulations. Sedimentation basins, sediment traps, etc., need to be cleaned frequently. The cleaning

frequency of these devices located in areas undergoing construction should be quite high because of the very large discharges of sediment from construction sites. Rill or gully erosion must be corrected immediately when first observed. During each inspection, the person conducting the inspection should document whether the BMP is performing correctly, any damage to the BMP since the last inspection, and what should be done to repair the BMP if damage has occurred. The housekeeping and spill prevention and response requirement is intended to prevent the discharge of trash, chemicals and other polluting materials from the site.

- G.4.e. This section details what must be included in the site description section, the erosion and sediment control section, the stormwater management control section and other control section of the SWPPP.

Site description section- Development projects must be phased or sequenced in order to minimize the amount of exposed soil at any one time and prevent the transport of sediment from the site during construction. Construction sequencing can be an effective tool for erosion and sediment control because it ensures that management practices are installed where necessary and when appropriate. A comparison of sediment loss from a typical development and from a comparable phased project showed a 42 percent reduction in sediment export in the phased project (EPA, 2002). As discussed previously, permittees are required to evaluate BMP performance. Based on the results of inspections and monitoring, remedial actions must be implemented, documented and reported in accordance with specific timeframes.

The purpose of stabilizing entrances to construction sites is to minimize the amount of sediment and mud being tracked offsite by motorized vehicles. Installing and maintaining a pad of gravel over filter cloth where construction traffic leaves a site can help stabilize the entrance. As a vehicle drives over the gravel pad, mud and other sediments are loosened and removed from the vehicle's wheels thereby reducing the offsite transport of sediment. The gravel pad also reduces mechanical erosion and prevents the formation of muddy wheel ruts, which can be a source of "track-out". The filter fabric reduces the amount of rutting caused by vehicle tires by spreading the vehicle's weight over a larger soil area than just the tire width. The filter fabric also separates the gravel from the soil below, preventing the gravel from being ground into the soil. Limiting construction site access to one point minimizes the surface area that could be affected by tracked out mud and sediment from construction traffic.

The permit requires calculation of the pre-development and post-development peak discharge rates for a one year, 24-hour storm in cubic feet per second. This is the most frequently occurring storm event throughout the year, therefore it causes the most sediment and erosion problems.

**Commented [A25]:** The fact sheet should explain here the purpose for requiring these calculations and what the numbers should be used for.

This section also details what is required on the site maps and requires that maps be submitted in ArcGIS or AutoCAD file type-

**Controls-** The duff layer (A layer of moderately to highly decomposed leaves, needles, fine twigs, and other organic material found between the mineral soil surface and litter layer of forest soil), native topsoil and natural vegetation must be retained in an undisturbed state to the extent practicable. This requirement is partly based on the fundamental principle that vegetation is the most effective form of erosion control. Vegetation reduces runoff volume, reduces flow velocity, filters suspended sediment, absorbs the erosive energy of falling raindrops, and retains soil structure. In areas where soils have been disturbed or exposed during construction activity, timely permanent seeding is appropriate in areas where permanent, long-lived vegetative cover is the most practical or most effective method of stabilizing the soil. Use of native vegetation is also encouraged and any revegetation should be in compliance with the West Virginia Noxious Weed Act (Code of West Virginia Chapter 19, Article 12). Vegetation controls erosion by protecting bare soil surfaces from displacement by raindrop impacts and by reducing the velocity and quantity of overland flow. The advantages of seeding over other means of establishing plants include lower initial costs and labor inputs. Seeding that produces a successful stand of grass has been shown to remove between 50 and 100 percent of total suspended solids from stormwater runoff, with an average removal of 90 percent (EPA 2002).

Sodding is a permanent erosion control practice that involves laying a continuous cover of grass sod on exposed soils. In addition to stabilizing soils, sodding can reduce the velocity of stormwater runoff. Sodding can provide immediate vegetative cover for critical areas and stabilize areas that cannot be vegetated by seed. It can also stabilize channels or swales that convey concentrated flows and reduce flow velocities. Sod has been shown to remove between 98 and 99 percent of total suspended solids in runoff, and is considered a highly effective best management practice (EPA 2002). Mulching is a temporary erosion control practice in which materials such as hay, wood chips, wood fibers, or straw are placed on exposed or recently planted soil surfaces. Mulching is highly recommended as a stabilization method and is most effective when anchored in place until vegetation is well established. Mulching can also reduce the velocity of stormwater runoff. When used in combination with seeding or planting, mulching can aid plant growth by holding seeds, fertilizers, and topsoil in place, by preventing birds from eating seeds, by retaining soil moisture, and by insulating plant roots against extreme temperatures.

The purpose of the requirement to minimize the disturbance of steep slopes is to minimize the amount of soil eroded on construction sites, and the amount of sediment and other pollutants discharged from the site. Minimizing the disturbance of steep slopes during construction activity can be accomplished through a number of practices. These include practices related to how much soil is exposed on steep slopes, such as phasing land disturbing activities, and providing timely soil stabilization on slopes, such as through the use of mulches, rolled erosion control products, and vegetation. Permittees have flexibility to select appropriate controls to

**Commented [A26]:** Please provide a basis or citation for making these statements.

minimize disturbance of steep slopes at their individual sites. Permittees also have flexibility to schedule and phase construction activities so as to limit the amount of land disturbed at one time and the duration of exposure on steep slopes. The permit does not prevent or prohibit disturbance on steep slopes. DEP recognizes that for some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain).

**Commented [A27]:** Are there any limitations on the max slope that is allowed? I didn't see this in the permit.

The requirement to preserve topsoil, unless infeasible implements the C&D rule noted in 40 CFR 450.21(a)(87). The requirement to preserve topsoil helps to maintain the soil structure on construction sites and provides a growing medium for vegetative stabilization measures. Better vegetative stabilization reduces erosion rates of the underlying soil and also increases the infiltrative capacity of the soil, thereby reducing the amount of sediment transported to downslope sediment and perimeter controls. Topsoil can be preserved by stockpiling the native topsoil on the site for later use (e.g., for vegetative stabilization), or by limiting disturbance and removal of the topsoil and associated vegetation. For example, topsoil can be preserved by limiting clearing and grading to only those areas where necessary to accommodate the building footprint. DEP notes that some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, DEP recognizes that preserving topsoil at the site would not be feasible or desirable. In addition, some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil. DEP is aware that stockpiling of topsoil in off-site locations, or transfer of topsoil to other locations, is frequently used in these situations and DEP would view this as acceptable practice. However, EPA notes, and DEP agrees, that stormwater discharges from any construction support activities meeting the requirements are also subject to the permit requirements.

**Commented [A28]:** What about the other 7 subsections of this regulation? Recommend they also be referenced throughout this section where they apply.

The purpose of the requirement to minimize soil compaction is to allow for infiltration and retention of stormwater to reduce stormwater discharge volume and velocity. Reducing stormwater discharges reduces erosion and therefore reduces the amount of sediment and other pollutants discharged from the site. To comply with this requirement, permittees may either restrict vehicle and equipment use on areas that will be vegetatively stabilized or where infiltration practices will be installed or can use soil conditioning techniques to de-compact soils to support vegetative growth. DEP notes that the requirement to use soil conditioning techniques is not required in any area where it would not be feasible, such as on steep slope areas or any other areas where it is not safe for the required equipment. DEP also notes that the requirement to minimize soil compaction does not apply to areas that will not be used for final vegetative stabilization or for areas where infiltration practices will be installed. For example, the requirements do not apply to disturbed areas that will become paved surfaces, such as roads, foundations, footings, or on embankments, or on areas where soil compaction is necessary by design.

**Commented [A29]:** Recommended edit since this is the state's permit.

If a project's earth disturbances are located within 50 feet of a surface water (defined as a "water of the state", surface waters do not include stormwater control features), the permittee is required to ensure that any discharges to surface waters through the area between the disturbed portions of the property and any surface waters located within 50-feet of the site are treated by

an area of undisturbed natural buffer and/or additional erosion and sediment controls in order to achieve a reduction in sediment load equivalent to that achieved by a 50-foot natural buffer. The requirements implements the C&D rule's requirement to minimize the discharge of pollutants from the site by providing and maintaining "natural buffers around surface waters... unless infeasible." See 40 CFR 450.21(a)(6). This requirement applies to all project sites that are situated within 50 feet of a surface water, with certain exceptions. Note that the requirements do not apply to stormwater control features (e.g., stormwater conveyance channels, sediment basins).

**Commented [A30]:** Exceptions should be explained here. Do they have to be approved by DEP? If so, it should be stated.

Sediment control systems create conditions that allow for the settlement of soil particles that are suspended in stormwater runoff. Sediment containment systems (sediment traps and sediment basins) are hydraulic controls that function by modifying the storm-runoff hydrograph and slowing water velocities. This allows for the settling and deposition of suspended particles by gravity.

**Commented [A31]:** I'm confused by this statement. Does this mean that SW controls can be placed in the buffer area? Or that the buffer is not required around SW controls?

Sediment traps are appropriate where the contributing drainage area is five acres or less.

Sediment basins are often used on construction sites to minimize sediment discharges. They are typically placed at or near low points of drainageways on in order to temporarily detain stormwater discharges, allowing sediment particulates to settle. Sediment basins are also often designed to reduce peak flow rates, reducing downstream flooding and channel erosion. At the point of discharge, which is typically a pipe or channel, installation of riprap or other stabilization measures is often necessary because the concentrated discharge can cause erosion. Sediment basins are also often designed to reduce flow duration impacts by reducing the total volume of stormwater being discharged or by providing extended detention to reduce discharge rates. The purpose of the requirements in this part is to provide specific design and maintenance requirements for the proper implementation of sediment basins, if used on a site. Sediment basins are generally larger and more effective in retaining sediment than temporary sediment traps and typically remain active throughout the construction period. A sediment basin must be used where the contributing drainage area is greater than five acres. Sediment basins must control the discharge in order to dewater the wet storage volume between 48 and 72 hours. This requirement may be waived at the discretion of the DEP when skimmer dewatering devices are used. In addition, the safety of embankment structures requires the outlets to safely pass the peak discharge from 25-year 24-hour storm.

The permit requires sediment traps and sediment basins to be sized for 3,600 cubic feet per acre of watershed draining to that structure, half of which is dry storage and half of which is wet storage. The permit now requires that dewatering structures must withdraw from the surface, unless infeasible, as required by the Effluent Guidelines Rule. The permit also states that, barring impossible site conditions, all projects will utilize, to the extent practicable, sediment traps or sediment basins and diversions.

The use of treatment chemicals may be used only in accordance with good engineering practices and specifications for use by the chemical provider/supplier. The use of cationic treatment chemicals is prohibited.

The SWPPP should address the steepness of cut-and-fill slopes and how the slopes will be protected from runoff, stabilized and maintained. Berms, diversions, and other stormwater practices that require excavation and filling should also be incorporated into the grading plan.

Rock outlet structures placed at the outfall of channels or culverts reduce the velocity of flow in the receiving channel to non-erosive rates. This practice applies where discharge velocities and energies at the outlets of culverts are sufficient to erode the next downstream reach and is applicable to outlets of all types such as sediment traps, sediment basins and culverts.

Sediment-laden water is not allowed to leave a site without going through an appropriate device.

Hay and straw bales are not acceptable BMPs. It has been the experience of this agency that hay or straw bales have a high rate of functional failure and that there are numerous other BMPs that are as easy to install and exceed the performance of hay or straw bales.

Antidegradation review is addressed in the General Permit for Construction Stormwater. The legislature, in codifying the Antidegradation Policy, eliminated general permit registrations from antidegradation review except in Tier 3 waters. However, general permits must go through antidegradation review during the issuance/reissuance process. Construction projects by their nature are normally short term and transient. Anticipating the scope and location of construction projects is difficult. While local, short term sediment impacts from construction projects can be extreme; in general, sediment impacts are temporary.

Stormwater management plan section - A description of measures that will be installed during construction to control pollutants in stormwater discharges after the project is completed must be included in the SWPPP. This is commonly described by providing final stabilization details. The completed project must convey stormwater runoff in a manner that will protect both the site and the receiving stream from post construction erosion and sedimentation. All waterways and other runoff conveyance structures must be permanently stabilized as appropriate for expected flows. Velocity dissipation devices must be placed at the outlet of all detention or retention structures and along the length of any outlet channel as necessary to provide a non-erosive velocity flow from the structure to a natural water course.

**Commented [A32]:** Has DEP gone through this antidegradation review process? If so, it should be stated here along with the results of their assessment.

**Commented [A33]:** What is this statement trying to say? What is the purpose of saying this here?

**Commented [A34]:** Recommend renaming to post-construction stormwater management plan

**Commented [A35]:** This is not an accurate statement. There are many ways that stormwater is managed post construction and described by the types of BMPs that will be used to control any change in land cover and/or runoff.



Projects located in areas that have local government requirements and/or criteria for post-construction stormwater management are subject to meeting those requirements and/or criteria.

Permanent stormwater control structures that will impound water shall be designed and certified by a registered professional engineer.

G.5. To meet water quality, the following guidelines must be followed.

Presumptive Conditions

Construction activities discharging to Tier 3 waters will go through the Tier 3 antidegradation review process.

No degradation will be allowed on Tier 3 waters except for temporary, short term activities (one year or less).

#### Public notice

~~These~~ Projects that have one or more of the following will be subject to the public notice requirements as outlined in 47CSR10 prior to receiving coverage under this permit.

1. Grading and stabilization last for more than one year
2. Land disturbance of 100 acres or more
3. Projects that discharge to or upstream of Tier 3 waters.

All applications subject to public notice must be submitted 100 days prior to construction. Public comments will be used in the decisions leading to issuing the approval or denial for coverage under the general permit.

#### Sediment basins

Sediment basins/traps must be installed with 3,600 cubic feet of storage measured from the bottom elevation of the structure to the top of the riser or weir, per acre of drainage and will have draw down times of 48 to 72 hours. Half of the pond will be in wet storage and half in dry storage. Dewatering devices that skim the discharge from the top several inches are required. Justification is required for alternative control devices.

#### Other control section

**Commented [A36]:** There are sections of the permit that were skipped here: Record Keeping and Maintenance. Recommend adding them here.

**Commented [A37]:** Typically, guidelines are not enforceable. Recommend using different terminology here.

**Commented [A38]:** Please explain what the Tier 3 antidegradation review process is here. Also, how does a permittee know that they are discharging to a Tier 3 water? Does DEP check as part of the application review?

**Commented [A39]:** This is not an allowable practice. If DEP believes that this is in the regs or statute somewhere, a citation should be provided here.

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**Commented [A40]:** Again, how would the permittees know if this applied to them?

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**Commented [A41]:** This section is located in the permit prior to Part G.5. It should be moved to that section of the fact sheet as well for consistency.

This section requires the solid waste be disposed of properly. Provisions must be made to control dust. This section also details maintenance, inspection, training and record keeping requirements. The requirement to restrict vehicle use to properly designated exit points, the requirement for appropriate stabilization techniques at all points that exit onto paved roads and the requirement that all public and private roads adjacent to a construction entrance must be inspected and cleaned of debris originating from the construction site and implement the C&D rule requirement to "minimize sediment discharges from the site." In order to avoid pollutants from being discharged into surface waters, the permittee must minimize the generation of dust through the application of water or other dust suppression techniques. The purpose of the requirement to minimize the generation of dust on the site is to minimize the discharge of sediment in stormwater. Dust suppression techniques prevent dust from being generated, minimizing the potential for the dust to accumulate where it is likely to discharge from the site in stormwater discharges.

#### Discharges to Impaired Waters

This permit does not authorize new sources or new discharges of constituents of concern to impaired waters unless consistent with the approved total maximum daily load (TMDL) and applicable state law. Impaired waters are those that do not meet applicable water quality standards and are listed on the Clean Water Act Section 303(d) list or in Category 4 of the Integrated Report.

Pollutants of concern are those sediment related constituents such as iron, aluminum or other parameters for which the water body is listed as impaired. Discharges of pollutants of concern to impaired waterbodies for which there is an approved TMDL are not eligible for coverage under this permit unless they are consistent with the approved TMDL. A TMDL is a plan of action used to clean up streams that are not meeting water quality standards. The plan includes pollution source identification and strategy development for contaminant source reduction or elimination. Within six months of the TMDL approval, permittees must incorporate any limitations, conditions or requirements applicable to their discharges necessary for compliance with the TMDL, including any requirements by the DEP rules, into their SWPPP in order to be eligible for coverage under this general permit. Pursuant to 40 CFR 122.44(d)(1)(vii)(B), effluent limits must be "consistent with the assumptions and requirements of any available wasteload allocation for the discharge...." In addition, the federal regulations generally prohibit issuance of a permit to a new discharger "if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.

#### Chesapeake Bay Watershed

**Commented [A42]:** This language is not consistent with G.5.b of the permit on page 22.

**Commented [A43]:** This should say "approved sediment related TMDL" to be consistent with the draft permit. It is preferable to use the term TMDL alone since it is more generic and will cover more pollutants. Since Construction SW permits primarily cause sediment impacts, EPA can accept "sediment related TMDLs" but would prefer the use of TMDL instead.

**Commented [A44]:** How is this accomplished?

**Commented [A45]:** How will the permittees know if their site discharges to waters with a TMDL, and if a discharge is consistent with the TMDL?

**Commented [A46]:** The permit makes no mention of the Chesapeake Bay or any specific requirements for discharges within the watershed.

The DEP is dedicated to reducing sediment laden stormwater discharges to water bodies leading to the Chesapeake Bay. The draft 2020 general permit mirrors the federal approach to controlling sediment discharges to impaired/TMDL waters in the EPA CGP by requiring more frequent inspections and additional stabilization requirements for sites discharging to impaired/TMDL waters. By inspecting more frequently, operators will be alerted to failing BMPs, or those otherwise requiring attention. The DEP intends to meet its other requirements as outlined in the Watershed Improvement Plan.

**Commented [A47]:** Does this apply to any TMDL or the Bay TMDL specifically?

**Commented [A48]:** The WIP is finalized. The fact sheet should explain what it says about construction stormwater here and what exactly the “other requirements” this statement applies to.

G.6. Endangered and Threatened Species and State Historic Preservation Officer.

If a site discharges to a stream where a federally endangered or threatened species or its habitat is present, the applicant must contact the U.S. Fish and Wildlife Service to ensure that requirements of the federal Endangered Species Act are met.

In addition, the DEP will include in the application instructions a list of streams in West Virginia with possible presence of endangered or threatened species, to assist applicants in determining when that issue needs to be considered. This list can be found at: <https://dep.wv.gov/WWE/Programs/stormwater/csw/Pages/home.aspx>

For those projects that may impact historic preservation sites, the permittee shall coordinate the project with the State Historic Preservation Officer.

- H. This paragraph serves as a reopener mechanism to go back to a permittee covered under the general permit and places any necessary additional requirements upon the site as necessary, due to potential or realized water quality impacts by the site stormwater discharges.

~~For those projects that may impact historic preservation sites, the permittee shall coordinate the project with the State Historic Preservation Officer.~~

**Commented [A49]:** Redundant. Stated above.

- I. This section explains the process ~~provides~~ for submitting the Notice of Termination (NOT) and explains final stabilization requirements. This section reminds the permittee that until permit coverage is terminated, the permittee is required to comply with all conditions and effluent limitations in the permit. Permit coverage is not terminated until DEP has received a complete and accurate NOT, certifying that the requirements for termination are met and DEP has conducted a final inspection verifying all disturbed lands met final stabilization requirements. The permittee may submit a certification of stabilization prepared by a professional engineer or professional land surveyor should DEP inspection staff not meet inspection deadlines.

**Commented [A50]:** If this happens, does DEP still submit something to the permittee to let them know the NOT is acceptable and processed? How does the permittee know they are no longer required to comply with the permit?

The State of West Virginia, Department of Environmental Protection, DEP, has made a tentative decision for a state NPDES permit as listed on this fact sheet. In order to provide public participation on the proposed issuance of the required permit, the following information is being

supplied in accordance with Title 47, Series10, Section 11.3.e.2 and 3, of the West Virginia Legislative Rules.

During the public comment period, any interested person may submit written comments on the draft permit. Comment shall be made in writing and addressed to:

**Director, DEP, DWWM**  
**601 57th Street SE**  
**Charleston, WV 25304-2345**  
**Attention: Sharon Mullins**  
**E-mail: [sharon.a.mullins@wv.gov](mailto:sharon.a.mullins@wv.gov)**

The Director shall hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest on issues relevant to the draft permit. Any person may submit oral or written statements and data concerning the draft permit; however, reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. A tape recording or written transcript of the hearing shall be made available to the public upon request. Should a public hearing for this draft general permit be held, it will take place at the DEP Headquarters Coopers Rock Training Room at 601 57<sup>th</sup> Street Southeast, Charleston, WV 25304 after proper notice to the public of the date and time.

If information received during the public comment period appears to raise substantial new questions, the Director may reopen the public comment period.

All applicable information concerning any permit application and the tentative decisions is on file and may be inspected by appointment, or copies obtained from the offices of the DEP, 601 57th Street SE, Charleston, West Virginia 25304, Monday through Friday (except State holidays) between 8:00 a.m. to 4:00 p.m.

Hearing impaired individuals having access to a Telecommunication Device for the Deaf (TDD) may contact our agency by calling (304) 926-0489. Calls must be made between 8 a.m. and 4:00 p.m. Monday through Friday.

Requests for additional information should be directed to Sharon Mullins at (304) 926-0499, Extension 1132 or [sharon.a.mullins@wv.gov](mailto:sharon.a.mullins@wv.gov).

Field Code Changed